

REMARKS

Specification

The specification has been amended on page 4 to provide basis for “tripropylphosphate and triisobutyl phosphate as co-catalysts. Note that these co-catalysts were recited in original claim 8. No new matter is involved in the amendment to the specification because original claims are considered to be part of the original disclosure.

Claims

Claim 1 step c) has been amended to replace “refluxed evaporator” with ---- catalyst recovery unit ---- as in step c) of original claim 1. The amendment to step e) of claim 1 wherein the expression “refluxed evaporator” is removed from these steps is to be found in the specification page 11, lines 17-20 wherein the overhead is separated by distillation to recover unconverted carbon tetrachloride and ethene. In step g) of claim 1 “refluxed evaporator” has been removed and the basis for step g) wherein the overhead fraction is distilled to recover purified 1,1,1,3-tetrachloropropene is to be found in the specification page 7, lines 11-13 and page 9, line 8-10 which define purification as referring to distillation.

The change to claim 32 is to be found in the specification page 6, last line of the chart. This corrects an obvious error.

Claim Rejection 35 USC § 103

Claims 1 and 23-37 stand finally rejected as being unpatentable over *Wilson et al* (U.S. 6,313,360) in view of *Woodard* (EP 0 131,561) and *Kohl et al* (U.S. 3,386,905).

Applicants respond: Claim 1 has been amended to further distance applicants' invention from the prior art cited to reject the claims. Note that independent claims have been amended to specify that the reactor temperature is between 80°C and 140°C; and that the reactor pressure is 10 to 300 pounds per square inch. These limitations are not shown by *Wilson* for preparing 1,1,1,3-tetrachloropropane. *Wilson* prepares 1,1,1,3,3-pentachloropropane. Note also that claim 1 has been amended to recite that the molar ratio including recycle streams of carbon tetrachloride and ethene is between 1.0 and 3.0. This limitation also is not shown by *Woodard*. Amendment to claim 1 merely incorporates subject matter of dependent claims and these limitations are not new limitations.

In rejecting the claims the Examiner on page 5 lines 3-12 states that one skilled in the art would be able to ascertain reaction conditions. Further, on page 6 third full paragraph, the Examiner states that "the reaction conditions of the instant invention are not unique, but are well known and taught by both *Kohl* and *Woodard*." Applicants' disagree with this conclusion. As noted above, claim 1 has been further amended to distance applicants' claims from the prior art. Note also that the claims have limitations not shown by the prior art and should not be dismissed by the Examiner. For example, note that the molar feed ratio of carbon tetrachloride and ethene in claims 1 and 28 is not shown by the prior art. Nor are the molar feed ratio tributylphosphate and metallic iron of claims 29 and 30. Also not shown are the molar feed ratio of dissolved iron and ethene of claims 31 and 32; the bottom temperature of the refluxed evaporator of claims 33 and 34; and the refluxed evaporator pressure of claim 35. Note particularly that the recycling as

set forth in claim 37 employing a second refluxed evaporator is not shown by the prior art. These are important limitations in applicants' invention.

It is not enough for the Examiner to conclusionally state that one of ordinary skill in the art would be able to ascertain reaction conditions of the claims (Examiner Official Action page 5); further the Examiner states that (page 6, third paragraph) the specific conditions of the claims are taught by both *Kohl* and *Woodard*. Pointed out herein, in applicants' discussion of the claims as set forth above specific limitations of the claims have not been addressed and it is incumbent that the Examiner do so to make a valid rejection under 35 USC § 103.

It is requested that the above amendment be entered after Final Rejection. Applicants have not been dilatory. The amendment answers new rejections made by the Examiner in the last Official Action. No new subject matter has been added to the claims.

It is requested that allowable subject matter be indicated in this application.

Sincerely,

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Date

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SR/jjr (03/15/05)

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<p align="center">CERTIFICATE OF TRANSMISSION</p> <p>I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.</p> <p>Date: March 16, 2005</p> <p>Express Mail Label No.: EV 480238645 US</p> <p>By: <u>Judy Robertson</u></p>
